A UNIFIED MMSE EQUALIZATION AND MULTI-USER DETECTION APPROACH FOR USE IN A CDMA SYSTEM

5

ABSTRACT

A unified minimum mean square error (MMSE) equalization/multi-user detection (MUD) approach for demodulating direct sequence CDMA (DS-CDMA) signals is described. In at least one embodiment, the unified approach is capable of generating a variety of cost-effective receiver demodulation techniques that may range from, for example, a low cost linear MMSE equalization technique to a relatively high complexity MMSE MUD.